

1. A trailer mounted automatic livestock feeding apparatus for portable bulk pellet or granular feed distribution to livestock in remote rural pastureland, said apparatus comprising:

a trailer portion, having a tongue, at least one stabilizer jack, a hitch, a bed, and at least one two wheeled-axle, said bed having an upper surface;

5 a base forming a trough having an external ridge;

a partial pyramid shaped incline ramp terminating in a flat portion having a central aperture, an upper surface and a lower surface;

an electric motor mounted to said lower surface of said flat portion, said electric motor having a drive shaft projecting upward through said central aperture of said flat portion;

10 a lateral distribution plate having an upper surface with a plurality of radial ridges, said lateral distribution plate also having a central bore adapted to engage said drive shaft of said electric motor;

a bin structure, comprising a front section, two side sections, a rear section having a rear access panel, a lower portion and an upper portion;

15 at least four outer support legs which support said bin structure over said incline ramp, said support legs having a lower end attached to said base through said incline ramp;

said lower portion further comprising a tapered tetrahedral bin floor section terminating into a drop port which includes a manually operated closure means to open and close said drop port;

said upper portion further comprising a storage bin defined by said front section, side sections, rear section and bin floor section, a solar cell and a retractable storage bin door providing access to said

20 storage bin; and

said front section further comprising a battery and timer mechanism recess covered by a hinged recess door panel, said battery and timer mechanism recess containing a rechargeable solar battery connected by electrical wiring to said solar cell on said upper portion, and a programmable timer connected to said rechargeable battery providing electrical power to said electrical motor.

2. The apparatus as disclosed in Claim 1, said trailer portion further comprising:

ramped wheel wells attached to said bed over said at least one two-wheeled axle, said wheel wells prohibiting feed from being trapped behind said wheel wells; and

a stabilizer jack attached to said tongue of said trailer portion and a stabilizer jack attached to said trailer portion behind said bin structure.

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3. The apparatus as disclosed in Claim 1, said upper portion further comprising:

a bin door retaining brace provided to support said storage bin door when open and providing protection to said solar panel from impact when loading said storage bin with feeding materials.

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4. The apparatus as disclosed in Claim 1, wherein said manually operated closure means comprises:

a slotted drop port frame attached to said drop port;

a slide plate slidably engaged with said slotted drop port frame; and

a slide plate arm having a first end attached to said slide plate, a second end forming a handle and

an intermediate pivot joint located between said first end and said second end, said second end and

handle extending through said front section.

5. The apparatus as disclosed in Claim 1, wherein said programmable timer has a capability one to eight feedings per day, depending on the size and feeding requirements of the livestock herd and a capability of adjusting the length of time of each feeding.

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6. The apparatus as disclosed in Claim 1, further comprising:

ramped wheel wells attached to said bed over said at least one two-wheeled axle, said wheel wells prohibiting feed from being trapped behind said wheel wells;

a stabilizer jack attached to said tongue of said trailer portion and a stabilizer jack attached to said trailer portion behind said bin structure.

said upper portion further comprising a bin door retaining brace provided to support said storage bin door when open and providing protection to said solar panel from impact when loading said storage bin with feeding materials;

said manually operated closure means further comprises a slotted drop port frame attached to said drop port, a slide plate slidably engaged with said slotted drop port frame, and

a slide plate arm having a first end attached to said slide plate, a second end forming a handle and an intermediate pivot joint located between said first end and said second end, said second end and handle extending through said front section; and

said programmable timer has a capability one to eight feedings per day, depending on the size and feeding requirements of the livestock herd and a capability of adjusting the length of time of each feeding.